

What is claimed is:

1. A method for forming a capacitor and a contact hole of a semiconductor device simultaneously comprising the steps of:

depositing a metal layer on a substrate;

depositing a titanium nitride (TiN) layer on the metal layer;

forming a pattern on the TiN layer and making a capacitor part and a contact hole part

using the pattern, the capacitor part comprising some portion of the metal layer and

the TiN layer, the contact hole part comprising another portion of the metal layer and

the TiN layer;

forming an insulating layer with a predetermined thickness over the substrate including

the capacitor part and the contact hole part;

forming an interlayer dielectric (ILD) layer on the insulating layer, the ILD layer being

relatively thicker than the insulating layer;

forming a first photoresist pattern on the ILD;

removing some parts of the ILD layer by an etching process using the first photoresist

pattern as a mask in order to form openings on the insulating layer in the capacitor

part and the contact hole part;

forming a second photoresist pattern over the ILD layer including the openings;

removing some part of the insulating layer and the TiN layer in the contact hole part by

an etching process using the second photoresist pattern as a mask in order to extend

the opening in the contact hole part to the metal layer;

removing the second photoresist pattern; and

filling the openings with tungsten to form tungsten plugs.

2. The method as defined by claim 1, wherein the metal layer of the capacitor part is used as a lower metal layer of a capacitor, the insulating layer is formed of nitride, and the tungsten plug on the capacitor part is used as an upper metal layer of a capacitor.